fluid ingesta, such as Leube's pancreatic emulsion. Milk will be found applicable to the great majority of cases, while one or more of the others may find their utility in a percentage of cases.—*Brit. Med. Journal,* January 26, 1889.

COCAINE IN CANCER.

After the removal of the entire left breast for cancer the disease reappeared. During three months the usual intense pain which accompanies such cases set in, and was not relieved by the ordinary remedies after a fair trial.

An ointment of cocaine, 1 in 20, had a marvellous effect. The pain was subdued almost immediately, and continually kept under control by its use. It was used for two months, there having been no occasion during that time even to increase the strength. The patient died without the least suffering.—*Lancet,* January 26, 1889.

MEDICINE.

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THE GEOGRAPHICAL DISTRIBUTION OF RICKETS, ACUTE AND CHRONIC RHEUMATISM, CHOREA, CANCER, AND URINARY CALCULUS IN THE BRITISH ISLANDS.

ISAMBARD OWEN (*Lancet,* January 19, 1889, 124) says that upward of 3000 replies have been received to the inquiry-papers sent out by the Collective Investigation Committee of the British Medical Association. The results of such inquiry must be taken in a general sense only, and not too much stress laid on points of detail. With these provisions they may be summed up as follows: 1. There was no district in the British isles in which acute and subacute rheumatism and malignant disease were not common. 2. Rickets, although not unknown in rural districts, was mainly a disease of towns and industrial regions, and especially of large industrial towns. It was rare in Scotland, the North of England, North Wales, and Ireland, with the exception of Ulster; more common in the rural districts of Ulster and the rest of England, and especially frequent in Cornwall, Kent, and North Essex. 3. Chorea was also mainly a disease of towns and industrial regions, though by no means unknown in rural districts. It was fairly evenly distributed in the rural portions of the four counties, rare at the seaside resorts, and, by exception, rather uncommon in Glasgow and in the south and the west of London. 4. The distribution of chorea was proportioned to the prevalence of acute and subacute rheumatism. 5. Urinary calculus exhibited a tendency to affect the eastern coasts of the two islands; its chief seat in South Britain being the county of Norfolk, and in North Britain the angle of land above Aberdeen. It was less prevalent in the coal fields, and especially apt to appear in the Black Country.

THE PATHOLOGY OF PERNICIOUS ANÆMIA.

WM. RUSSELL (*British Med. Journ.*, January 12, 1889) says that the first question arising in the consideration of this subject is, whether the disease is the result of diminished formation of red corpuscles or of their increased destruction. It seems an accepted fact that the red marrow of the bones is at least one, if not the most important seat of the production of the red blood-cells, and that the liver is certainly one of the sites of their destruction. In 1875, Pepper and Tyson found that in pernicious anæmia the yellow marrow of the long bones was transformed into red marrow. It seems hardly possible that when there is this great increase in the red marrow, there should be a diminution in the formation of red corpuscles. Rather must we assume that there is an extraordinary effort on the part of this blood-producing tissue to meet the demand for red corpuscles, and that it consequently undergoes hyperplasia. We have next to consider pernicious anæmia from the side of increased destruction of the blood. When there is destruction of the corpuscles, the hæmoglobin decomposes and forms a yellowish pigment, which is hæmatin, or some allied substance capable of giving an iron reaction to ordinary tests. The iron present in normal red blood-cells cannot be demonstrated in this simple way.

To test an organ for decomposed hæmoglobin, a small portion of it is put for some minutes into a solution of ferrocyanide of potassium, and then transferred to dilute hydrochloric acid, whereupon a blue color will be developed if the decomposed hæmoglobin be present, and this will vary in intensity with the amount of the blood pigment. In a case of pernicious anæmia under his observation, the author found marked evidences of blood destruction in the liver, spleen, and kidneys. Other writers have also reported an increased amount of iron in the latter organ. It seemed desirable to make a series of observations on the iron reaction in cases of other diseases. For this purpose he examined the livers of forty-four cases of different affections, and the spleens and kidneys of some of these. The results showed (the figures are given) that in a considerable number of cases there were evidences of destruction of blood in the liver and spleen, and even in the kidneys; not constantly present in the spleen, and unusual in the liver.

He concludes, accordingly, that pernicious anæmia is one of certain conditions characterized by an increased destruction of blood corpuscles. That this destruction is due to the condition in which the blood reaches the liver, and not to the action of the liver itself, is shown by the fact that in all the cases in which the liver gave a very marked iron reaction the spleen did so likewise. The ultimate question concerns the nature of the blood condition which leads to this exaggerated destruction. It may be that some process in the elaboration of the corpuscles is defective, or that some blood purifying organ is at fault. What it is cannot yet be decided, and further pathological observation is demanded.